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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,197	06/26/2001	Stanley Gene Boyer	07099-1466-00000	9386
826	7590	11/27/2006	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			BROOKS, MATTHEW L	
		ART UNIT	PAPER NUMBER	
		3629		

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/891,197	BOYER ET AL.
	Examiner	Art Unit
	Matthew L. Brooks	3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 September 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13, 15, 16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13, 15, 16 and 18-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application.
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112 1<sup>st</sup> and 2<sup>nd</sup>***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Applicant has laid out very broad definitions for the terms "entity" and "event" but has failed to define "response". The invention is not enabled because the multitude of responses that may be possible to that of an event occurring is limitless and for examiner to figure out all of the possibilities of responses would be undue, hence to make the invention would require undue experimentation. Also the meaning given to the current claim language as broad as it is leads to 101, concreteness and abstractness rejections and indefiniteness. (see below). The problem with the claims, which has no arisen due to amendments made, is that when Examiner turns to pg 3 of specification, lines 8-14, there are at least nine instances listed of what an "event" may include. Then directly below, same page there are listed twelve things that may be an "entity". By Examiner's calculation this leads to 173,820,100,608,000 different.

combinations and possibilities of what the invention is and how a user could put together or make. This is why the claims as stated are not enabled because it would place an undue burden on a user of applicant's invention to establish the system because of all the possibilities. Applicant has merely claimed the blocks but as not specifically recited the use of any of them to build a system. Which is also why the invention is not concrete and too abstract for it to be patentable (see below).

3. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims have at least 173,820,100,608,000 possible interpretations. Also note, all of the interpretations that are possible have lead to prolonged and unnecessary prosecution, given the reasonable interpretation applied to the claims (see 102 below).

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The basis of this rejection is set forth in the test of:

whether the invention produces a useful, concrete, and tangible result.

The present invention fails the "useful, concrete, tangible" result test. For an invention to be "useful" it must satisfy the utility requirement of section 101. The PTO's official interpretation of the utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. MPEP 2107. The claim must be for a practical application that produces a useful result and the Applicant should specifically

recite in the claim the practical application. A claim that can be read so broadly as to include statutory and nonstatutory subject matter must be amended to limit the claim to a practical application. In other words, if the specification discloses a practical application of an abstract idea, but the **claim is broader than the disclosure** such that it recites an abstraction, then the claim must be rejected. In the present case Applicant's use of the terms "event" and "entity" encompass so many possibilities that the end result is an abstraction. In this case the claim is broader than the disclosure because no substance is given to the aforementioned words. Ie; if the claim read a person signs up to be notified of data about a cancellation of a flight (first event) and then the person (first entity) is notified, the person then responds by changing said flight (second event) this done on internet over server, server then would transmit/notify ticket server (second entity) of change. The above example which clearly falls within the scope of the claims is specific and substantial as the statute requires.

Furtherstill due to the response the present invention lacks concreteness. Usually concreteness arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864 (Fed. Cir. 2000) (where asserted result produced by the claimed invention is "irreproducible" claim should be rejected under section 101). The opposite of "concrete" is unrepeatable or unpredictable. Resolving this question is dependent on the level of skill in the art. For example, if the claimed invention is for a process which requires a particular skill, to determine whether that process is substantially repeatable will necessarily require a

determination of the level of skill of the ordinary artisan in that field. An appropriate rejection under 35 U.S.C. § 101 should be accompanied by a lack of enablement rejection under 35 U.S.C. § 112, paragraph 1, because the invention cannot operate as intended without undue experimentation. *See infra.* In this regard Examiner turns to the Specification to determine what will happen (event) and who will be notified (entities) and comes up with an incredible amount of possibilities and would require undue experimentation on the part of one of ordinary skill the art to determine all of the possibilities. To determine this would be to invent the invention due to all of the possible outcomes that could be expected and the many hours of undue experimentation to determine the results and even still another person skilled in the art may choose to notify different entities based upon the event, hence the invention lacks concreteness and is not enabled. Further the invention used by one is not substantially repeatable by another nor will the system, as claimed, produce the same result again. Thus lacking a practical application.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application

filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-4 and 6-13 and 15-16 and 18-22** are rejected under 35 U.S.C. 102(e) as being anticipated by patent number 6,496,568 Donald R. Nelson (Nelson).

3. With respect to **Claims 1, 2 and 9**: Nelson discloses

A method for notifying entities of events in an integrated event notification system comprised of a plurality of heterogeneous systems, each entity associated with a different one of the heterogeneous systems, (Column 1, 35-50) Applicant has defined "system" as an individual or entity within the specification (See page 3, 1-5) and "event" and "entity" very broadly (See Page 3, 7-25 and Page 4, 1-8) the method comprising:

a. detecting a first event of a plurality of events, with the detecting of the event including monitoring information from a memory for the occurrence of an event and publishing the first event upon occurrence of the first event (C1, 50-55; which detects and receives an event, when determines the set of "subscribers" must be memory then provides notification/publish),

b. determining if a first entity has previously subscribed to receive notification of a first type of events comprising the first event(C1, 50-55; must make determination subscribed otherwise would not send notification/publish);

c. automatically transmitting, in response to detecting the first event and determining that the first entity previously subscribed to receive notification of the first type of events and without user intervention, a notification to the heterogeneous system associated with a first entity of the first event, the first entity initiating a first response to

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the occurrence of the first event with at least a second event resulting from the first response such that the first event triggers occurrence of the second event, (C1, 50-67 and C2, 1-60 This claim is interpreted as follows: " a notice is transmitted to a first subscriber, then the entity/customer responds by rebooking flight/initiating a first response (c2,1-5) the second event is the actual placement/booking of passenger on a new flight during rebook process which was triggered by the first response), and

d. automatically transmitting, without user intervention, a notification to the heterogeneous system associated with a second entity of the second event, the second entity initiating a second response to the occurrence of the second event. (Column 2, 1-16; an alternative embodiment shown with an airline system). the second entity having previously subscribed to receive notification of a second type of events comprising the second event, wherein the first type of events is different than the second type of events (Column 2, 1-16 Examiner considers "real time data system" to be a second entity because Applicants specification defined systems as entities on Page 3, 1-3. And certainly given broadest reasonable interpretation of subscribe the real-time data system is subscribed to receive data other wise it would not be sent to system. Also, second entity could be, among many things, the "paging system" See Fig 1, 162)Column 3, 60-68 Examiner considers this to be another customer of a same flight that registered to be notified of its cancellation, delay, or event which have different subscriber levels are two customers and two separate entities and Inherently if the two entities were on different/same flights the type of events to be notified of would be

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different, such as flight 408 is delayed, one event and now because of that, flight 409 is delayed).

4. With respect to **Claim 3**: Nelson discloses

wherein the second entity initiates a third response in parallel to multiple heterogeneous systems (Column 4, 34-45).

5. With respect to **Claim 4**: Nelson discloses

wherein the second event comprises rebooking a passenger on a different flight (Column 4, 35-40 wherein the customer can select from a list of available alternative flights, hence rebooking).

6. With respect to **Claim 6**: Nelson discloses

automatically transmitting, without user intervention, a notification to the heterogeneous system associated with a third entity of the additional event (Figure 1, 113 and further more this third entity could simply be a notified customer in which Nelson anticipates notifying a "multitude" of entities).

7. With respect to **Claim 7**: Nelson discloses

wherein the third entity is subscribed to receive the notification (Column 4, 65-67 through Column 5, 1-8 wherein if the third entity is receiving the notification inherently it must be registered to receive it).

8. With respect to **Claim 8**: Nelson discloses

wherein the notification occurs in real-time (Nelson's invention and notification is in real-time and examples can be found Column 2, 1-5 and Column 4, 60).

9. With respect to **Claim 11**: Nelson discloses

wherein the heterogeneous system associated with the second entity does not monitor for the occurrence of the first event or the second event (Column 4, 27-31 where in Nelson discloses a standard paging system and pager which certainly does not monitor for events).

10. With respect to **Claim 12**: Nelson discloses

wherein the heterogeneous system associated with the second entity is a non-listening-receiving system (Fig. 1, 162 and Column 2, 52-60 and Column 4, 27-31 as the systems disclosed by Nelson, such as phone and paging, certainly are “non-listening” as defined by Applicant’s Specification → see page 9, 14-16; wherein non-listening is equal to capable of receiving information).

11. With respect to **Claim 13, 16, 19, and 20**: Nelson discloses

wherein the automatically transmitting of the notification to the heterogeneous system associated with the second entity includes determining whether the second entity has previously subscribed to receive notification of the second event (Column 3, 50-68 and C4, 50-57 and Column 1, 60-65 “**subscribers**”).

12. With respect to **Claim 14**: Nelson discloses

CANCELLED.

13. With respect to **Claim 15**: Nelson discloses

type of events that is information associated with a plurality of entities; that includes information about a flight being delayed or a baggage claim being changed for an entire flight (Column 2, 40-47),

the second type of events is information associated with only a single entity, that includes information about a person having been rebooked on a particular flight (Column 2, 40-45).

14. With respect to **Claim 17**: Nelson discloses  
CANCELLED.

15. With respect to **Claim 18**: Nelson discloses  
the first type of events that is information associated with a plurality of entities, that includes information about a flight being delayed or a baggage claim being changed for an entire flight (Column 2, 40-47),  
the second type of events is information associated with only a single entity that includes information about a person having been rebooked on a particular flight (Column 2, 40-45).

16. Claims 1-13 and 15-16 and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Patent No.: 6,633,910 (Rajan).

With respect to **Claim 1**: Rajan discloses:

A method for notifying entities of events in an integrated event notification system comprised of a plurality of heterogeneous systems, each entity associated with a different one of the heterogeneous systems, (Fig 1 and C3, 30-35) the method comprising:

a. detecting a first event of a plurality of events, with the detecting of the event including monitoring information from a memory for the occurrence of an event and

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publishing the first event upon occurrence of the first event (Fig 1, 21-25 are servers that monitor for events and publish to main server 33),

b. wherein occurrence of the first event triggers occurrence of at least a second event resulting from a first response to the occurrence of the first event; (Once at main server Fig 1, 33 many events may be triggered all of which would depend upon subscriber rules; C14, 10-65.)

c. automatically transmitting, in response to the detecting of the first event and without user intervention, a notification to the heterogeneous system associated with a first entity of the first event, the first entity having previously subscribed to receive notification of the first event and initiating the first response to the occurrence of the first event (Fig 1, at this point server 33 would send to a subscriber 39-45 automatically),

d. with the automatically transmitting of the notification to the heterogeneous system associated with the first entity including determining whether the first entity has previously subscribed to receive notification of the event; (The determining step as shown in Fig 4, 81 "Guard") and

e. automatically transmitting, without user intervention, a notification to the heterogeneous system associated with a second entity of the second event (Rajan shows possible to send to any entity that has previously subscribed, including a plurality of entities for same and/or different events C6,40-55 and C7, 55-60 and/or C12, 3-5 one or more requests), the second entity initiating a second response to the occurrence of the second event, the second entity having previously subscribed to receive notification

of a second type of events comprising the second event, wherein the first type of events is different than the second type of events (C14, 7-65 and C15, 1-65 and C16, 1-65).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

19. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson or Rajan as applied to claim 1-4 and 6-20 above, and further in view of Patent Number: 6,246,320 (Monroe).

Nelson teaches all of the steps claimed with the exception of notifying ground crew and the rescheduling thereof. Monroe teaches the use of an automatic detector of events and event notification system as a convenient method of providing notification to ground crew and rescheduling thereof (Column 2, 30-60 and Column 3, 30-60 and Column 4 29-55). The business practice of rescheduling ground crew based upon the

occurrence of an event is an old and well-established business practice. This practice is designed to ensure smooth operation of the airport and maximize efficiency upon unexpected changes. It improves customer relations and helps to generate return business. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the method of event notification the notification to ground crew as taught by Monroe to Nelson, in view of the well known business practice of rescheduling of ground crew based upon the occurrence of an event as set forth above. Note the added steps in Monroe, which would include notifying ground crew of an event, are merely the automation of the old and well known manual process thereof.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-13, 15, 16, and 18-22 have been considered but are moot in view of the new ground(s) of rejection in that all indefiniteness and 101 must be addressed to determine what the invention is.

***Conclusion***

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

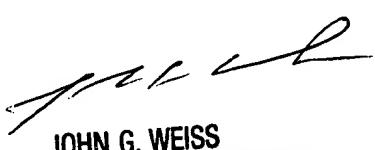
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew L. Brooks whose telephone number is (571) 272-8112. The examiner can normally be reached on Monday - Friday; 8 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-8112. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JOHN G. WEISS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600